Resource Summary Report

Generated by dkNET on May 20, 2025

Cognitive Atlas

RRID:SCR_002793
Type: Tool

Proper Citation

Cognitive Atlas (RRID:SCR_002793)

Resource Information

URL: http://www.cognitiveatlas.org/

Proper Citation: Cognitive Atlas (RRID:SCR_002793)

Description: Knowledge base (or ontology) that characterizes the state of current thought in cognitive science that captures knowledge from users with expertise in psychology, cognitive science, and neuroscience. There are two basic kinds of knowledge in the knowledge base. Terms provide definitions and properties for individual concepts and tasks. Assertions describe relations between terms in the same way that a sentence describes relations between parts of speech. The goal is to develop a knowledge base that will support annotation of data in databases, as well as supporting improved discourse in the community. It is open to all interested researchers. A fundamental feature of the knowledge base is the desire and ability to capture not just agreement but also disagreement regarding definitions and assertions. Thus, if you see a definition or assertion that you disagree with, then you can assert and describe your disagreement. The project is led by Russell Poldrack, Professor of Psychology and Neurobiology at the University of Texas at Austin in collaboration with the UCLA Center for Computational Biology (A. Toga, PI) and UCLA Consortium for Neuropsychiatric Phenomics (R. Bilder, PI). Most tasks used in cognitive psychology research are not identical across different laboratories or even within the same laboratory over time. A major advantage of anchoring cognitive ontologies to the measurement level is that the strategy for determining changes in task properties is easier than tracking changes in concept definitions and usage. The process is easier because task parameters are usually (if not always) operationalized objectively, offering a clear basis to judge divergence in methods. The process is also easier because most tasks are based on prior tasks, and thus can more readily be considered descendants in a phylogenetic sense.

Abbreviations: Cognitive Atlas

Synonyms: cognitive atlas - a collaboratively developed cognitive science ontology

Resource Type: data or information resource, controlled vocabulary, ontology

Defining Citation: PMID:21922006, PMID:19634038

Keywords: cognitive function, cognitive phenotype, cognitive process, cognitive science, cognitive state, human, cognitive ontology, cognitive task, experimental task, mental construct, concept, task, eeg, meg, electrocorticography, magnetic resonance, ontology, pet, spect, knowledge environment

Funding: NIMH RO1MH082795

Availability: Account required, Creative Commons Attribution-ShareAlike License, The community can contribute to this resource

Resource Name: Cognitive Atlas

Resource ID: SCR_002793

Alternate IDs: nif-0000-24591

Alternate URLs: http://www.nitrc.org/projects/cogatlas

Record Creation Time: 20220129T080215+0000

Record Last Update: 20250519T203220+0000

Ratings and Alerts

No rating or validation information has been found for Cognitive Atlas.

No alerts have been found for Cognitive Atlas.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 29 mentions in open access literature.

Listed below are recent publications. The full list is available at dkNET.

van Stee A, et al. (2025) Apples and oranges: Conceptual review as task analysis method. The European journal of neuroscience, 61(1), e16623.

Hansen JY, et al. (2024) Integrating brainstem and cortical functional architectures. Nature neuroscience, 27(12), 2500.

Pinho AL, et al. (2024) Individual Brain Charting dataset extension, third release for movie watching and retinotopy data. Scientific data, 11(1), 590.

Morys F, et al. (2024) Neural correlates of obesity across the lifespan. Communications biology, 7(1), 656.

Rahayel S, et al. (2023) Mitochondrial function-associated genes underlie cortical atrophy in prodromal synucleinopathies. Brain : a journal of neurology, 146(8), 3301.

Yang H, et al. (2023) Connectional Hierarchy in Human Brain Revealed by Individual Variability of Functional Network Edges. bioRxiv : the preprint server for biology.

Robbins K, et al. (2022) Building FAIR Functionality: Annotating Events in Time Series Data Using Hierarchical Event Descriptors (HED). Neuroinformatics, 20(2), 463.

Frumento S, et al. (2021) Systematic Review of Studies on Subliminal Exposure to Phobic Stimuli: Integrating Therapeutic Models for Specific Phobias. Frontiers in neuroscience, 15, 654170.

Dockès J, et al. (2020) NeuroQuery, comprehensive meta-analysis of human brain mapping. eLife, 9.

Chen L, et al. (2020) An event based topic learning pipeline for neuroimaging literature mining. Brain informatics, 7(1), 18.

Pinho AL, et al. (2020) Individual Brain Charting dataset extension, second release of high-resolution fMRI data for cognitive mapping. Scientific data, 7(1), 353.

Riedel MC, et al. (2019) Automated, Efficient, and Accelerated Knowledge Modeling of the Cognitive Neuroimaging Literature Using the ATHENA Toolkit. Frontiers in neuroscience, 13, 494.

López-Gil JM, et al. (2016) Web Ontologies to Categorialy Structure Reality: Representations of Human Emotional, Cognitive, and Motivational Processes. Frontiers in psychology, 7, 551.

Gilmore RO, et al. (2016) From big data to deep insight in developmental science. Wiley interdisciplinary reviews. Cognitive science, 7(2), 112.

Sochat VV, et al. (2016) The Experiment Factory: Standardizing Behavioral Experiments. Frontiers in psychology, 7, 610.

Schurz M, et al. (2015) An evaluation of neurocognitive models of theory of mind. Frontiers in

psychology, 6, 1610.

Kibbe WA, et al. (2015) Disease Ontology 2015 update: an expanded and updated database of human diseases for linking biomedical knowledge through disease data. Nucleic acids research, 43(Database issue), D1071.

Batrancourt B, et al. (2015) A multilayer ontology of instruments for neurological, behavioral and cognitive assessments. Neuroinformatics, 13(1), 93.

Hastings J, et al. (2014) Interdisciplinary perspectives on the development, integration, and application of cognitive ontologies. Frontiers in neuroinformatics, 8, 62.

Verbruggen F, et al. (2014) Banishing the Control Homunculi in Studies of Action Control and Behavior Change. Perspectives on psychological science : a journal of the Association for Psychological Science, 9(5), 497.